

₩ Ð 9-4 □X≡76 ■□ΩM• 월 1 9 20 നു≈െ⊱െ ഒ⊏∎≏∙ 💂 8000 40000 ⊡Ж≡५ം ഉ□■≏∙ ⊑ M⊠SM+S=□□○ 2□■2. 旦 സ്⊠ളാസ്♦ ഉഥ∎≏∙ ⊒ **BOD** 10 10 B ■□□○ॐ●₭ж™ۍ 幻□■亞· ⊒ 

## 60月9日下湖田60日88

○2006 06004 0400 0 00010

**™**25X■ ■□⊙M• 🖺

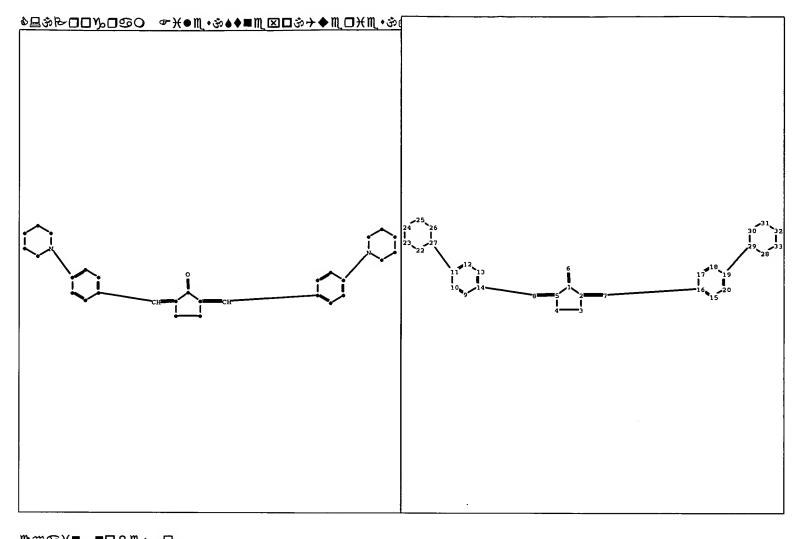
♠ឺॐ♦™p⇔ ●ጢ❖ጢ● 뭘 **●■8008●●** \$24886 ◆**♦६**⊗**4**星**0**~ 20□♦8₽□O ∕>⊜⊌∛♦□O □●目4864目●目 ●◆884里予圖 

€ Ð ☐X■Y₀ ■□≏M⋅ 鰛 • l⁄® **P**4 **₽** ™≈⊙X■ 幻□■亞· ⊒ **BOD** 40 **60** 400B □Ж≣५ം ഉ□■≏• ⊟് احفاح المحمد الم كالأسادة المسام والمسام والم والمسام و 100 Pro **1200 6** 旦 ∭⊠ോ№♦ ೪□■亞• 🖻 ©Ø₿ ©Ø₿ ©Ø\$ 9004 4dDB **■□□○⊙●米ж**Щ亞 원□**■亞• 믈** تولاد : «الماد والمواط والمواط والمواط والمواط والمواط والمواط 

# 40 BP BP MB & 2 B & &

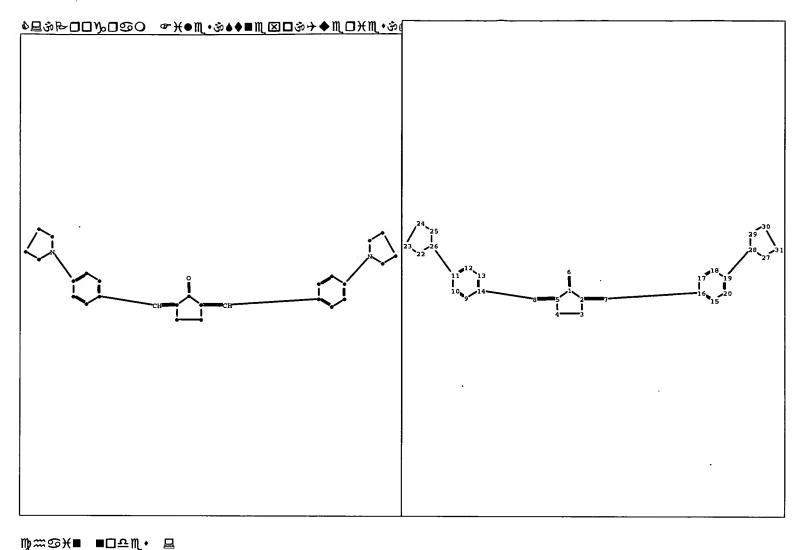
m) # 50 X ■ ■ □ - M • 🖳

♦♦₿®¢星靈 **◆●**\$⊗**4**星� 20□♦\$QO @ Le Be de O O ■●■8●□○



```
M) ## 50 X ■ ■ □ - 2 M • 🚊
    ***
     ₼
□Ӿ■⅓ ■□≏♏∙ 믤
    9
            ₽
                             P4
                     ₽√®
                       നു≈െ∺െ ഗി⊡≣മ∙ 🖻
           ⊕Ø∂$ 4Ø∂¶ ∂∂Ø№ ∂∞Ø№
  BaD46
□Ӿ≡⅓ ഉ□≡≏∙ ഒ
  旦
  TODE CODE OF BEDEE
              14014 14011
          ∭⊠ോൂ∳ श्□∎む∙ 🖺
  80D4
                         ⊕₽₽₽ 4₽₽¶
■□□○ॐ●₭ж∭ʊ थे□■亞• Ē
  معالات المعالم المعالم المعالم المعاملات المعالم المعالم المعاملات المعاملات المعاملات المعاملات المعاملات الم
  01006 0600404000 0 00000
```

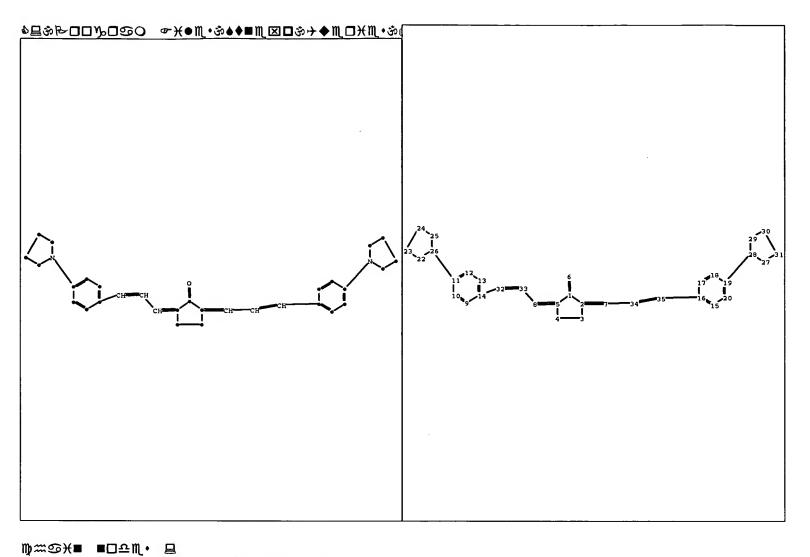
```
•*•••n • n • n • n
 BB&◆□○
                $$$$$$$
                   ●目♥◎६♥♥
 ◆◆$⊗$₽₽
    10 = 8 € □ O
       ○哈里的◆日〇
                  @20€8◆□O
 日本は日の
```



A **E** □Ӿ■⅓。 ■□≏♏・ 昌 8 **l**⊕ **₽**2€ സം‱ള∺െ ഉ⊏∎≏∙ ⊟ 8004 60001 4000 00011 00014 □Ӿ≡⅓ എ□≡≏∙ ഒ المراوا ما المراوات ا الأهلا الأمور والأمور والمرابع المرابع M X S M ◆ S ■ □ □ O & □ ■ 2 • ·**旦** CCOL Cidly P-4000 160110 14011a M ⊠ 35 M ♦ 8 C ■ 3. • B BO 4 **⊕**Ø∂\$ 4Ø∂¶ ■□□○ॐ●₭ж₩む 幻□■む• ≧ 'eOC | COC | المرابع المراب

40 BP BB # B & A B & &

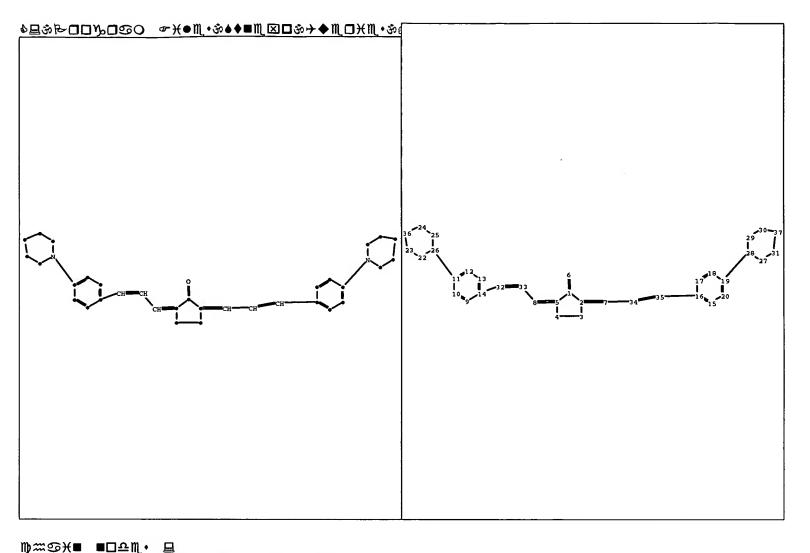
o×∞oon≈ onone ⊒ 2888999 ◆♦७⊗७⊒₽ 20□♦§⊒@v @200 



**=** □Ӿ■⅓ ■□≏♏∙ 鰛 8 **₽**\$ <u>~</u> 6 € 6 € **℃ B**4 ∰V⊚ 100 P CODE CION CION @ 10 D B 10 □Ӿ≡⅓ ጺ□■ユ・ ☳ المرافق المراف الأفالا الأفيام بالمؤام أحموهم والمؤادة D CODE 8⊕108~ **₽**46**⊅**₽v⊕ സ്⊠ോണം∳ പ്⊡⊞ഫ• 🖻 OD! OD! OD! 800% 40DII **■□□○⊙●米器順亞 幻□■亞• 믈** معادا المعادة والمعادة والمعادة المعادة المعا

#### 

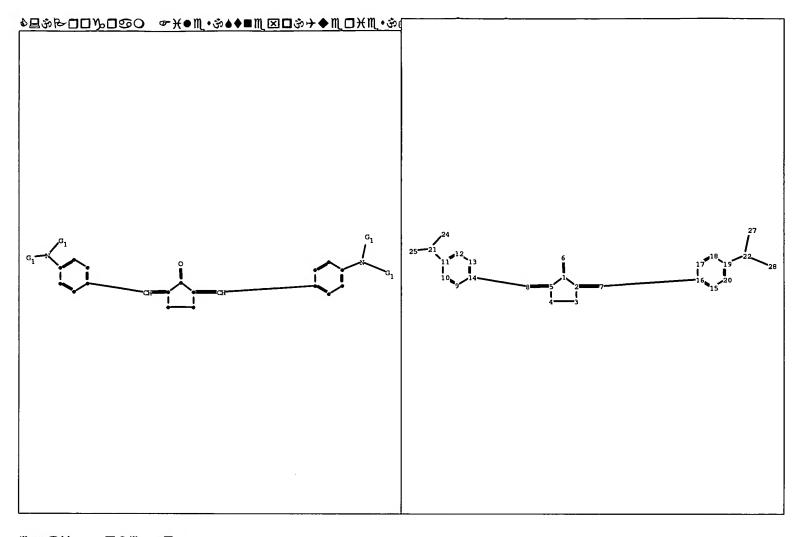
品目を◆□○ \$22000000 **◆●**\$⊗**4■⊕** 10=8400 ②●■8◆□○ @ 488 P C O ©10 4 8 4 □ O 



**E** ð □X■76 ■□≏M• ⊒ 薑 7 **l**® **E ₽**₩ ™™©X■ 幻□■亞· ⊟ 8aD4 **⊕**ض¶ 40DII □Ӿ≡५ ഉ□■≏∙ ⊒ المراوا المراو 1400120 M X S M ♦ S = □ □ ○ 8 □ ■ 2 • 140D140 <u>₽</u>~000 | | 1 ∭⊠രാസം♦ ଶ□∎亞• 🖻 ODB ODB OD8 **60** 4O) **■□□○⊙●米ж**∭쇼 幻□**■**쇼• 🗟 المامات والموام والموام

### 10 BI BE MOS QOIS

♠®®♦™¤≈ ●ጢ❖ጢ● 🖳 **♦♦७७७८८८ ●■\$⊗**₹**●**◆ 10 **□ \$ \$ □ 0** ○●B&◆□○ @ 48≥6 C @20 \$ **□** 0 ●回●8日回



```
€
                                                                                             ₼
                                                                                                                          .
E
                                                                                                                                                                                                                                                                                                                         图图
◻Ӿ◾ツ。 ◾◻ഫጢ∙ 鰛
                                    ℃
                                                                                                                                                                                                               ₽$
                                                                                                                                                                                                                                                                                                                                                                       നു≈ൊ∺∎ ഗു□∎≏• 🖴
                                     <u>~</u>002 ₽0€
                                                                                                                                  8004
                                                                                                                                                                                   والأصاد والأمام كالأحام وكاله المحادثة
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             □Ӿ≡⅓ 幻□■ユ・ 믤
                                    المراوا المراوا المراوات المرا
                                     القوام والمؤثث والمؤلف كالمؤلف
                                                                                                                                                                         സ്⊠ോസ്♦ംഗം∎□□○ श्□∎む•
                                                                                                                                                                        സ്⊠ോസ്♦ പ്⊡∎ഫ∙ 🗏
                                     BOD 40
                                                                                                                                                                                                                                                                                                                                                                                                                                  60002 40001
■□□○ॐ●₭點ጢۍ 幻□■亞· ⊟
                                     معاملات المعام والمعام والمعام والمعاملة والمعاملة المعاملة المعام
```

#### 10日10月11日100日18

∙¥∽o∮™™ •M÷M• 🖴 \$**⊒**\$⊗**8**♦♦ 圖旦₹◆□○ ◆◆\$®&星® 10 4 6 B 01 ②側旦8◆□○ Dro B & CO ●●●●◎●●● ●●第四個星命圖

L11 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:86693 CAPLUS

DN 140:61032

- TI Fluorescence behavior of new 3-pyridinecarbonitrile containing compounds and their application in security paper. [Erratum to documents cited in CA137:312346, CAS140:43519]
- AU Basta, Altaf H.; Girgis, Adel S.; El-Saied, Houssni
- CS Cellulose and Paper Department, National Research Centre, Cairo, 12622, Egypt
- SO Dyes and Pigments (2003), 56(3), 261 CODEN: DYPIDX; ISSN: 0143-7208
- PB Elsevier Science Ltd.
- DT Journal
- LA English
- AB The correct footnote to Table 1 on page 8 should, in fact, read as follows: ".vphi.s: quantum yield of the tested compound, .vphi.r; quantum yield of the reference standard (quinine sulfate)".
- IT 125407-22-9P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(yellow fluorescent dye; preparation and fluorescence of cycloalkanone derivs. and their application in security paper (Erratum))

RN 125407-22-9 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(1-piperidinyl)phenyl]methylene]- (9CI) (CA INDEX NAME)

- L11 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2002:943679 CAPLUS
- DN 140:43519
- TI Fluorescence behavior of new 3-pyridinecarbonitrile containing compounds and their application in security paper. [Erratum to document cited in CA137:312346]
- AU Basta, Altaf H.; Girgis, Adel S.; El-Saied, Houssni
- CS Cellulose and Paper Department, National Research Centre, Cairo, 12622, Egypt
- SO Dyes and Pigments (2003), 56(1), 89 CODEN: DYPIDX; ISSN: 0143-7208
- PB Elsevier Science Ltd.
- DT Journal
- LA English
- AB In Table 1, the first footnote should read as follows: " $\Phi$ s: quantum yield of the tested compound,  $\Phi$ r: quantum yield of the reference standard (quinine sulfate).".
- IT 125407-22-9P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(yellow fluorescent dye; preparation and fluorescence of cycloalkanone derivs. and their application in security paper (Erratum))

RN 125407-22-9 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(1-piperidinyl)phenyl]methylene]- (9CI) (CA INDEX NAME)

L11 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:532398 CAPLUS

DN 137:312346

TI Fluorescence behavior of new 3-pyridinecarbonitrile containing compounds and their application in security paper

AU Basta, Altaf H.; Girgis, Adel S.; El-Saied, Houssni

CS Cellulose & Paper Department, National Research Centre, Cairo, 12622, Egypt

SO Dyes and Pigments (2002), 54(1), 1-10 CODEN: DYPIDX; ISSN: 0143-7208

PB Elsevier Science Ltd.

DT Journal

LA English

OS CASREACT 137:312346

AB The fluorescence properties of newly synthesized 3-pyridinecarbonitrilecontaining compds. were determined The application of such compds. for preparation

special type of paper was investigated by studying the fluorescence behavior and mech. properties of treated paper sheets prepared from bagasse pulp.

IT 125407-22-9P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(yellow fluorescent dye; preparation and fluorescence of cycloalkanone derivs. and their application in security paper)

RN 125407-22-9 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(1-piperidinyl)phenyl]methylene]- (9CI) (CA INDEX NAME)

# RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:100740 CAPLUS

DN 112:100740

TI Photopolymerization initiator and thermal-transfer recording medium

IN Okuma, Norio

PA Canon K. K., Japan; Sanyo Chemical Industries Ltd.

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO.

DATE

PI JP 01174503 . A2 19890711 JP 1987-335732 19871228

PRAI JP 1987-335732 19871228

AB The title photopolymn. initiator is composed of  $\alpha$ -diketone derivative, and I or II [Ar1, Ar2 aromatic ring, heterocyclic ring; R1 = H, C1-10 alkyl, alkenyl, alkoxy, or alkylthio, C6-12 aryl, aryloxy, or heterocyclic ring with number of C and non-C atoms to be 5-15; X = non-metallic atom for forming a ring]. The thermal-transfer recording layer is composed of the photoinitiator, and monomer, oligomer or polymer with unsatd. double bond or these mixture An image-forming material my be encapsulated. The initiator is especially useful in one-shot color recording.

IT 125407-22-9

=>

RL: USES (Uses)

(photopolymn. initiator composition containing  $\alpha$ -diketone and)

RN 125407-22-9 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(1-piperidinyl)phenyl]methylene]- (9CI) (CA INDEX NAME)

L10 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Two-photon absorbing polymerizable compositions, their photopolymerization and applications for stereophotolithography and color filters

AN 2005:96112 CAPLUS

DN 142:186505

TI Two-photon absorbing polymerizable compositions, their photopolymerization and applications for stereophotolithography and color filters

IN Akiba, Masaharu; Takizawa, Hiroo

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 66 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2005029725	A2	20050203	JP 2003-272369	20030709
PRAI	JP 2003-272369		20030709		

AB The compns. contain polymerizable compds., two-photon absorbing compds., polymerization initiators, and coloring agents. The compns. are polymerized by irradiation with light of wavelength longer than absorption regions of the compns. from UV to visible ray and other than absorption peaks to give colored products. The compns. are effectively photopolymd. and colored independently of concentration of the coloring agents.

IT 52560-25-5

RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses)

(two-photon absorbing compound; photopolymn. of two-photon absorbing polymerizable compns. for manufacture of stereophotolithog. and color filters)

RN 52560-25-5 CAPLUS

CN Cyclopentanone, 2,5-bis[3-[4-(dimethylamino)phenyl]-2-propenylidene]- (9CI) (CA INDEX NAME)

L10 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Two-photon absorbing polymerization method and optical recording material

AN 2004:1058981 CAPLUS

DN 142:45982

TI Two-photon absorbing polymerization method and optical recording material

IN Takizawa, Hiroo

PA Fuji Photo Film Co., Ltd., Japan

SO U.S. Pat. Appl. Publ., 118 pp.

CODEN: USXXCO

DT Patent

LA English

FAN CNT 2

IAN. CNI Z				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004245432	A1	20041209	US 2004-849519	20040520
JP 2004346238	A2	20041209	JP 2003-146527	20030523
JP 2005097538	A2	20050414	JP 2004-199006	20040706
PRAI JP 2003-146527	Α	20030523		

JP 2003-312744 A 20030904

AB A two-photon absorbing polymerization method comprises a first step of irradiating light absorbable by two-photon absorption to form a latent image and a second step of exciting the latent image to cause polymerization A two-photon absorbing optical recording method comprises a first step of forming a latent image of a color-forming material by two-photon absorption, a second step of irradiating light on the latent image of a color-forming material to cause polymerization based on the linear absorption of

the color-forming material, and thereby forming difference in the refractive index to perform a recording.

IT 52560-25-5

and

RL: TEM (Technical or engineered material use); USES (Uses) (two-photon absorbing compound; two-photon absorbing polymerization method

optical recording material)

RN 52560-25-5 CAPLUS

CN Cyclopentanone, 2,5-bis[3-[4-(dimethylamino)phenyl]-2-propenylidene]-(9CI) (CA INDEX NAME)

L10 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Polymerizable compositions showing nonresonant two-photon absorption and method for three-dimensional refractive index modulation of them and optical recording therewith

AN 2004:1058477 CAPLUS

DN 142:45976

TI Polymerizable compositions showing nonresonant two-photon absorption and method for three-dimensional refractive index modulation of them and optical recording therewith

IN Takizawa, Hiroo

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 63 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN CNT 2

	C1. 1 -				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2004346238	A2	20041209	JP 2003-146527	20030523
	US 2004245432	A1	20041209	US 2004-849519	20040520
PRAI	JP 2003-146527	A	20030523		
	JP 2003-312744	A	20030904		
OS	MARPAT 142.45976				

AB The compns. comprise (A) two-photon-absorbing compds. (e.g., methine dyes, phthalocyanine dyes, merocyanine dyes, oxonol dyes), (B) (radical- or acid-generating) polymerization initiators, (C) (radically or cationically polymerizable) monomers, and (D) binders. For modulation of refractive index, the compns. are photopolymd. by two-photon absorption induced by laser irradiation at linear absorption-free wavelength which is longer than linear absorption bands of A. After the irradiation, composition ratio of C

polymers to D in the compns. is unequalized between at focal regions and at the other regions, allowing the refractive index modulation and

three-dimensional optical recording.

#### IT 52560-25-5

RL: TEM (Technical or engineered material use); USES (Uses) (two-photon-absorbing dyes; polymerizable compns. showing nonresonant two-photon absorption for three-dimensional refractive index modulation and optical recording)

RN 52560-25-5 CAPLUS

L10 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Preparation of cyclopentanones showing light absorption in a wide wavelength range

AN 2004:993104 CAPLUS

DN 141:410640

TI Preparation of cyclopentanones showing light absorption in a wide wavelength range

IN Ihara, Junichiro; Takahashi, Yoshiharu; Kawada, Toshio

PA Hayashibara Biochemical Laboratories, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004323394	A2	20041118	JP 2003-118089	20030423
PRAT	JP 2003-118089		20030423		

OS CASREACT 141:410640; MARPAT 141:410640

AB The cyclopentanones I or II (R9 = H, 4-R4R5NC6H3R6; R1-R8 = H, substituent), showing absorption maximum at ≥500 nm and half width of absorption coefficient ≥50 nm from the maximum, are prepared The cyclopentanones are useful as photosensitizers, light absorbers, etc. (no data). Thus, 4-Me2NC6H4CH:CHCHO was treated with cyclopentanone in the presence of NaOH to give I (R1 = R2 = Me, R3 = R9 = H) showing absorption maximum 520 nm and half width 50 nm (thin film).

#### IT 52560-25-5P 127371-20-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of cyclopentanones showing light absorption in a wide wavelength range)

RN 52560-25-5 CAPLUS

RN 127371-20-4 CAPLUS

CN Cyclopentanone, 2,5-bis[3-[4-(diethylamino)phenyl]-2-propenylidene]- (9CI) (CA INDEX NAME)

L10 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI The electronic structure and spectroscopy of diarylidene-cycloalkanones and their protonated cations

AN 2004:321272 CAPLUS

DN 141:224972

TI The electronic structure and spectroscopy of diarylidene-cycloalkanones and their protonated cations

AU Ucak-Astarlioglu, Mine Gunes

CS Worcester Polytechnic Institute, Worcester, MA, USA

SO (2003) 234 pp. Avail.: UMI, Order No. DA3089482 From: Diss. Abstr. Int., B 2003, 64(5), 2208

DT Dissertation

LA English

AB Unavailable

IT 52560-25-5

RL: PRP (Properties)

(ab initio and absorption spectroscopy on electronic structure of diarylidene-cycloalkanones and protonated diarylidene-cycloalkanones cations)

RN 52560-25-5 CAPLUS

CN Cyclopentanone, 2,5-bis[3-[4-(dimethylamino)phenyl]-2-propenylidene](9CI) (CA INDEX NAME)

L10 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Liquid crystal compositions with high order parameter for guest-host-type liquid crystal displays

AN 2004:291213 CAPLUS

DN 140:312174

TI Liquid crystal compositions with high order parameter for guest-host-type liquid crystal displays

IN Kato, Takashi; Takizawa, Hiroo; Akiba, Masaharu

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 30 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 2004107502 A2 20040408 JP 2002-272634 20020919 PRAI JP 2002-272634 20020919

OS MARPAT 140:312174

AB The compns. comprise liquid crystals and nonresonant two-photon absorbing compds. as dichroic dyes. The liquid crystal displays provide high-contrast images.

IT 677004-24-9

RL: DEV (Device component use); USES (Uses)
(nonresonant two-photon absorbing compds.; liquid crystal compns. containing nonresonant two-photon absorbing compds. for high-contrast guest-host-type liquid crystal displays)

RN 677004-24-9 CAPLUS

CN Cyclopentanone, 2,5-bis[(2E)-3-[4-(dimethylamino)phenyl]-2-propenylidene], (2E,5E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$E$$
 $E$ 
 $E$ 
 $NMe_2$ 

L10 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Compounds with efficient two-photon absorption and emission properties, and method of excitation and light emission using them

AN 2003:508499 CAPLUS

DN 139:92471

TI Compounds with efficient two-photon absorption and emission properties, and method of excitation and light emission using them

IN Akiba, Masaharu; Takizawa, Hiroo; Tani, Takeharu; Kawamata, Jun

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 19 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΙ	JP 2003183213	A2	20030703	JP 2002-251398	20020829
PRAI	JP 2001-268991	Α	20010905		
OS	MADDAT 120.02/71				

OS MARPAT 139:92471

AB The invention relates to the compds. X2(CR4:CR3)mCO(CR1CR2)nX1 (X1, X2 = aryl, hetero-ring group; R1-4 = H, substituent, maybe forming ring; n, m = 1-4) showing nonconjugated two-photon absorption.

IT 52560-25-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(compds. with efficient nonlinear two-photon absorption and emission)

RN 52560-25-5 CAPLUS

IT 553654-76-5

RL: TEM (Technical or engineered material use); USES (Uses) (compds. with efficient nonlinear two-photon absorption and emission)

RN 553654-76-5 CAPLUS

L10 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Optical disks and their information recording using multiphoton absorption

AN 2003:196637 CAPLUS

DN 138:229319

TI Optical disks and their information recording using multiphoton absorption

IN Akiba, Masaharu; Kawamata, Jun

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 3

PAN.CNI 3				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		<b></b>		
PI JP 2003075961	A2	20030312	JP 2001-268990	20010905
US 2003162124	A1	20030828	US 2002-233424	20020904
PRAI JP 2001-268989	Α	20010905		
JP 2001-268990	Α	20010905		
JP 2001-268991	Α	20010905		

OS MARPAT 138:229319

AB The optical disks contain compds. represented by general formula X2(CR4:CR3)mCO(CR1:CR2)nX1 [I; X1, X2 = (un)substituted aryl, (un)substituted heterocyclic group; R1-R4 = H, substituent; any of R1-R4 may be bonded to each other and form ring; n, m = 1-4 integer], whose 2-photon absorption wavelength can be controlled easily and whose cross-sectional area of 2-photon absorption are large. Their recording process employs multiphoton absorption involving 2-photon absorption, induced by irradiation of laser light of wavelength free from linear absorption and longer than the linear absorption region of the compds. I.

IT 52560-25-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(optical disks using aldol condensation products of ketones and aldehydes and their recording using multiphoton absorption)

RN 52560-25-5 CAPLUS

L10 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Two-photon polymerizable compositions and photopolymerization method

AN 2003:196461 CAPLUS

DN 138:222341

TI Two-photon polymerizable compositions and photopolymerization method

IN Akiba, Masaharu; Kawamata, Jun

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 16 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2003073410	A2	20030312	JP 2001-268989	20010905
US 2003162124	A1	20030828	US 2002-233424	20020904
PRAI JP 2001-268989	A	20010905		
JP 2001-268990	Α	20010905		
JP 2001-268991	A	.20010905		

AB Title compns. comprise (A) 2-photon-absorbing materials X2(CR4:CR3)mC(:0)(CR1:CR2)nX1 [I; X1, X2 = (un)substituted aryl or heterocyclic group; R1-R4 = H, substituent; R1-R4 may form ring; m, n = 1-4] and (B) photopolymerizable monomers or oligomers. The compns. are irradiated with linear absorption-free laser light having longer wavelength than linear absorption band of I to induce multiphoton absorption for photopolymn. The compns. can be cured by laser light having various wavelength. Thus, a composition containing a reaction product of

p-(dimethylamino)cinnamic aldehyde and cyclopentanone and SCR 701 (UV-curable urethane acrylate) was irradiated with 1053-nm laser light to give a cured product.

IT 52560-25-5P

RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(2-photon absorbers; two-photon photopolymerizable compns. curable by laser light having various wavelength)

RN 52560-25-5 CAPLUS

L10 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Two-photon induced fluorescence properties of a class of conjugated ketone derivatives

AN 2003:147633 CAPLUS

DN 138:392285

TI Two-photon induced fluorescence properties of a class of conjugated ketone derivatives

AU Kawamata, Jun; Akiba, Masaharu; Inagaki, Yoshio

CS Research Institute for Electronic Science, Hokkaido University, Sapporo, 060-0812, Japan

SO Japanese Journal of Applied Physics, Part 2: Letters (2003), 42(1A/B), L17-L19
CODEN: JAPLD8

PB Japan Society of Applied Physics

DT Journal

LA English

The authors have designed bis(cinnamylidene)cycloalkanone derivs. as two-photon absorption (TPA) compds. that possess a much stronger two-photon absorption induced fluorescence (TPF) than common organic dyes when excited with near-IR laser radiation. The TPF intensity of the saturated solution of 2,5-bis(p-dimethylaminocinnamylidene)cyclopentanone (DMACCP) excited using a Q-switched Nd:YAG laser at 1064 nm is 11 times larger than that of the most promising TPF compds. The TPA cross section of the present compds., as estimated by a fluorescence-based technique, varied from 5 + 10-50 cm4s/photon for 2,6-bis[3-(9-ethyl)carbazoyl-3-ylidene]cyclohexanone (DMACCH) to 20 + 10-50 cm4s/photon for DMACCP at an excitation wavelength of 1064 nm.

IT 52560-25-5

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)

(two-photon induced fluorescence properties of a class of conjugated ketone derivs.)

RN 52560-25-5 CAPLUS

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Photopolymerizable compositions for lithographic printing plates

AN 1993:437581 CAPLUS

DN 119:37581

TI Photopolymerizable compositions for lithographic printing plates

IN Okamoto, Hiroaki

PA Okamoto Kagaku Kogyo Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 05078410 PRAI JP 1991-268302	A2	19930330 19910919	JP 1991-268302	19910919

OS MARPAT 119:37581

AB The title compns. comprise radical polymerizable compds. having ≥2

ethylenically unsatd. double bonds and photoinitiator mixts. containing p-RR1NC6H4(CH:CH)nCH:CR2COCR22:CH(CH:CH)np-C6H4NRR1 [R, R1 = C1-6 alkyl, cycloalkyl, hydroxyalkyl; RR1 may be tetramethylethylene (sic), pentamethylethylene (sic), oxybisethylene; R2, R22 = H, alkyl, Ph; R2R22 may be (CH2)2, (CH2)3, or CO; n = 0-3], PPh3 and/or quaternary phosphonium salts, thiols I (Z = NH, S, O), and tetrazolium derivs. II [R3-5 = alkyl, (un)substituted aryl, styryl, thienyl, trimethylammoniumindolyl; X = Cl, perchloride]. The compns. show high Ar laser sensitivity and are useful as photosensitive layer in presensitized lithog, printing plates.

IT 52560-25-5

RL: USES (Uses)

(photoinitiators containing, in photosensitive layers for lithog. printing plates)

RN 52560-25-5 CAPLUS

L10 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Photopolymerizable composition

AN 1990:243096 CAPLUS

DN 112:243096

TI Photopolymerizable composition

IN Imahashi, Satoshi; Saito, Atsushi; Yamashita, Katuhiro

PA Toyo Boseki K. K., Japan

SO Ger. Offen., 18 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΙ	DE 3918105	A1	19891214	DE 1989-3918105	19890602
	JP 01304453	A2	19891208	JP 1988-136272	19880602
	JP 2757375	B2	19980525		
	JP 02113250	A2	19900425	JP 1988-266654	19881022
	JP 02157761	A2	19900618	JP 1988-312748	19881210
	US 4987056	A	19910122	US 1989-360831	19890602
PRAI	JP 1988-136272	Α	19880602		
	JP 1988-266654	Α	19881022		
	JP 1988-312748	Α	19881210		
OS	MARPAT 112:243096				

AB The title composition contains: (1) ≥1 ethylenically unsatd. compound which is not a gas at room temperature; (2) ≥1 organometallic arene compound; (3) ≥1 compound selected from an unsatd. o-aminophenyl ketone, a pyridine derivative or its salts, or a xanthene or thioxanthene compound and their mixts.; and optionally (4) ≥1 compound selected from a phenylglycine derivative, a cyclic diketone compound, or their mixts. The composition has high photosensitivity. The material can be used in industrial printing, photoresists, and the like.

IT 127371-20-4 127371-28-2

RL: USES (Uses)

(photopolymerizable photoimaging composition containing)

RN 127371-20-4 CAPLUS

RN 127371-28-2 CAPLUS

CN Glycine, N,N'-[(2-oxo-1,3-cyclopentanediylidene)bis(1-propen-1-yl-3-ylidene-4,1-phenylene)]bis[N-ethyl- (9CI) (CA INDEX NAME)

PAGE 1-B

— сн<sub>2</sub>— со<sub>2</sub>н

L10 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Visible ray-sensitive photopolymerizable vinyl polymer compositions

AN 1990:88367 CAPLUS

DN 112:88367

TI Visible ray-sensitive photopolymerizable vinyl polymer compositions

IN Imahashi, Satoshi; Saito, Atsushi

PA Toyobo Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 01205153	A2	19890817	JP 1988-29581	19880210
PRAI	JP 1988-29581		19880210		

AB The title composition contains ≥1 vinyl compds. nongaseous at room temperature, an organic peroxide group ArC(:0)02- [Ar = Ph (substituted with ≥1 groups selected from Ph, amino, carbonyl, and halo), C1-4 alkyl, C1-4 alkoxy]-containing compound, and p-aminophenyl unsatd. ketone I [R1-2 = H, C1-5 alkyl; R3 = methylidine, C1-5 alkylenylidine forming ring with CO; R4 = C, (substituted) Ph, a group forming indanone or tetralone with R3 and CO; R5 = p-R6R7NC6H4(CH:CH)nCH:; R6-7 = H, C1-5 alkyl; m, n = 0, 1]. The composition is useful for a photoresist or a printing plate. Thus, a transparent PET film was coated with a composition of methacrylic acid-Me methacrylate copolymer, tetraethylene glycol diacrylate, 3,3',4,4'-tetra(tert-butylperoxycarbonyl)benzophenone,

2,5-bis(4'-diethylaminobenzylidene)cyclopentanone, MeOH, and EtOAc, dried, coated with aqueous poly(vinyl alc.), dried, neg. pattern-wise irradiated at 490 nm, aqueous Na2CO3-developed, and washed to give a highly-cured pattern.

IT 52560-25-5

RL: USES (Uses)

(photoresists from, visible ray-sensitive)

RN 52560-25-5 CAPLUS

L10 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Photopolymerizable compositions containing cyclic cis- $\alpha$ -dicarbonyl compounds and selected sensitizers

AN 1974:114843 CAPLUS

DN 80:114843

TI Photopolymerizable compositions containing cyclic cis- $\alpha$ -dicarbonyl compounds and selected sensitizers

IN Chang, Catherine T.

PA du Pont de Nemours, E. I., and Co.

SO U.S., 7 pp. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 3756827	Α	19730904	US 1972-220694	19720125
	DE 2302820	A1	19730830	DE 1973-2302820	19730120
	GB 1415378	Α	19751126	GB 1973-3240	19730122
	BE 794482	A1	19730724	BE 1973-126841	19730124
	FR 2169192	A1	19730907	FR 1973-2445	19730124
	JP 48084183	A2	19731108	JP 1973-10004	19730125
	US 28789	E	19760427	US 1975-608673	19750828
PRA:	I US 1972-220694	Α	19720125		

AB Photopolymerizable compns. of high photospeed consists of an ethylenically unsatd. monomer capable of photoinitiated addition polymerization and photoinitiator

combination of a cyclic cis-\$\alpha\$-dicarbonyl compound, such as 2,3-norbornadione (I), 2,2,5,5-tetramethyltetrahydro-3,4-furandione, indole-2,3-dione, and a radiation-absorbing compound having a maximum absorption at <520 nm capable of sensitizing the polymerizing action of the above dicarbonyl compound, such as Michler's ketone (II), 3,3'-diethylthiacyanine p-toluenesulfonate, 4-(dimethylamino)benzoquinone, Acridine Orange, and optionally a free-radical producing H or electron donor compound and a polymeric binder. Thus, a solution containing cellulose acetate 2.7, cellulose acetate butyrate 4.2, trimethylolpropane triacrylate 13.5, Me2CO 116, I 0.047, and II 0.047 g was coated on a poly(ethylene terephthalate) (III) support at 0.002 in. wet thickness, dried, laminated with a III cover sheet, exposed using a 1000-W W-lamp at 44 in. through an Eastman Kodak M-type number 5 step tablet, and developed by dusting with Jungle Black to give an equivalent exposure time of 2 vs. .apprx.400 for a II-free control.

L17 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:705357 CAPLUS

DN 133:303571

TI IR-laser sensitive composition for lithographic plate making by direct imaging

IN Nakamura, Ippei

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 32 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

L'ETA . (	CNII				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2000275828	A2	20001006	JP 1999-82401	19990325
	EP 1038668	A2	20000927	EP 2000-105952	20000323
	EP 1038668	A3	20010228		
	EP 1038668	B1	20050525		
	R: AT, BE, CH,	DE, DK	, ES, FR, GB	, GR, IT, LI, LU, NL,	SE, MC, PT,
	IE, SI, LT,	LV, FI	, RO		
	US 6355396	B1	20020312	US 2000-533946	20000323
PRAI	JP 1999-82401	A	19990325		
~~	MARRIE 100 000==4				

OS MARPAT 133:303571

AB The invention relates to an IR-laser sensitive composition has an IR absorbing material and a polymer insol. in water and soluble in an alkali solution, wherein the composition shows the high sensitivity and the high development latitude.

IT 38394-53-5P, 2,5-Bis [4-(diethylamino)benzylidene]cyclopentanone
301193-31-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(IR absorbing agent in IR-laser sensitive composition)

RN 38394-53-5 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(diethylamino)phenyl]methylene]- (9CI) (CA INDEX NAME)

RN 301193-31-7 CAPLUS

CN Cyclopentanone, 2-[[4-(diethylamino)phenyl]methylene]-5-[[4-[ethyl(2-hydroxyethyl)amino]phenyl]methylene]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Et} & \text{Et} \\ \text{N-} \text{CH}_2\text{-} \text{CH}_2\text{-} \text{OH} \\ \end{array}$$

L17 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1991:153838 CAPLUS

DN 114:153838

TI Improved photopolymers for holographic recording. I. **Imaging** properties

AU Monroe, Bruce M.; Smothers, William K.; Keys, Dalen E.; Krebs, Robert R.; Mickish, Daniel J.; Harrington, Albert F.; Schicker, Scott R.; Armstrong, Mark K.; Chan, Dominic M. T.; Weathers, Carolyn I.

CS Imaging Syst. Dep., E. I. du Pont de Nemours and Co., Inc., Wilmington, DE, 19880-0352, USA

SO Journal of Imaging Science (1991), 35(1), 19-25 CODEN: JISCEJ; ISSN: 8750-9237

DT Journal

LA English

AB Improved photopolymers for holog. recording are described along with a brief review of the basic technol. Holog. diffraction gratings with high refractive index modulation are prepared from photopolymers containing a liquid aromatic monomer, such as 2-phenoxyethyl acrylate, and an aliphatic binder,

such as cell

as cellulose acetate butyrate. Higher refractive index modulations are attained when a second, solid, aromatic monomer that contains heavy atoms or polycyclic aromatic group is used in combination with the liquid aromatic monomer.

Holog. mirrors with high refractive index modulations are produced from materials that contain poly(vinyl acetate) or poly(vinyl butyral) binder. The refractive index modulations of mirrors formed in the poly(vinyl acetate) - and poly(vinyl butyral) -containing materials can be enhanced by treatment with an organic solvent or by thermal treatment.

IT 38394-53-5

RL: USES (Uses)

(photopolymn. mixture containing sensitizer of, for holog.)

RN 38394-53-5 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(diethylamino)phenyl]methylene]- (9CI) (CA INDEX NAME)

L17 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:28198 CAPLUS

DN 112:28198

TI Photopolymerizable composition for refractive index imaging

IN Monroe, Bruce Malcolm; Smothers, William Karl

PA du Pont de Nemours, E. I., and Co., USA

SO Eur. Pat. Appl., 25 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	<del></del>				
	PATENT NO.	KIND [	DATE	APPLICATION NO.	DATE
					<del></del>
ΡI	EP 324480	A2 1	19890719	EP 1989-100495	19890112
	EP 324480	A3 1	19890927		
	EP 324480	B1 1	19940413		
	R: AT, BE, CH,	DE, FR,	GB, IT, LI,	LU, NL, SE	
	US 4942112	A 1	L9900717	US 1988-144355	19880115
	BR 8900133	A 1	19890912	BR 1989-133	19890112
	AT 104451	E 1	L9940415	AT 1989-100495	19890112
	CA 1332796	A1 1	19941101	CA 1989-588121	19890112

	AU 8928480	A1	19890720	AU 1989-28480	19890113
	AU 603027	B2	19901101		
	JP 02003081	A2	19900108	JP 1989-5068	19890113
	JP 06100827	B4	19941212		
	CN 1035364	Α	19890906	CN 1989-100195	19890114
	US 5098803	Α	19920324	US 1990-480352	19900214
	CN 1067319	Α	19921223	CN 1992-101819	19920314
	JP 06043634	A2	19940218	JP 1992-342139	19921222
	JP 2636653	B2	19970730		
PRAI	US 1988-144355	Α	19880115	,	
	EP 1989-100495	Α	19890112		
	CN 1989-100195	Α	19890114		
OS	MARPAT 112:28198				

AB A substantially solid photopolymerizable composition that forms a refractive-index image upon exposure to actinic radiation as the sole processing step comprises 25-75% of a solvent-soluble thermoplastic polymeric binder, 5-60% of a liquid ethylenically unsatd. monomer having a b.p. >100° and being capable of addition polymerization, and 0.1-10% of a photoinitiator system that activated polymerization of the unsatd. monomer upon exposure to actinic radiation. The photopolymerizable composition may also contain a liquid plasticizer selected from tris(2-ethylhexyl)phosphate, glyceryl tributyrate, and compds. having the formula R1CO(OC2H4)xO2CR2. R102C(CH2)yCO2R2, or R3(OCH2CHR4)zOH (R1, R2 = C1-10 alkyl; R3 = H, C8-16 alkyl; R4 = H, Me; x = 1-4; y = 2-20; Z = 1-20). The photopolymerizable composition thus prepared is useful in preparing optical elements, especially holograms.

IT 38394-53-5

RL: USES (Uses)

(photopolymerizable compns. containing, for causing refractive index changes upon curing for preparation of optical elements and holograms)

RN 38394-53-5 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(diethylamino)phenyl]methylene]- (9CI) (CA INDEX NAME)

L17 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

1985:496389 CAPLUS AN

DN 103:96389

TI Photoinsolubilizing resin composition

PA Agency of Industrial Sciences and Technology, Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LΑ Japanese

FAN. CNT 1

PATENT NO.		KIND	DATE APPLICATION NO.		DATE
ΡI	JP 60078443	A2	19850504	JP 1983-186398	19831005
PRAT	JP 05065869 JP 1983-186398	B4	19930920 19831005		

Resin composition contains ethylenic monomer and a photoinitiator, which is a combination of an unsatd. ketone having the general formula I (R, R1, R4, R5 = alkyl; R2, R3 = H, or are combined to form C1-3 alkylene group that is a part of a ring system; n = 0,1) with a diaryliodonium salt. The

unsatd. ketone effectively promotes photodecompn. of the iodonium compound, and the use of the photoinitiator provides high sensitivity of the resin composition, especially at longer wavelengths. Thus, 0.01 part of diphenyliodonium

hexafluorophosphate and 0.01 part of bis(p-dimethylaminobenzylidene)aceton e were added to 1 part of 10% dioxane solution of a copolymer prepared by introducing methacryloyl group to 1:1 chloromethylstyrene-Me methacrylate copolymer, and the mixture was coated on an anodized Al plate.

Photosensitivity to Xe lamp radiation was 32 times higher than that of com. products.

IT 19226-99-4

RL: USES (Uses)

(photoimaging resin composition containing)

RN 19226-99-4 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(dimethylamino)phenyl]methylene]- (9CI) (CA INDEX NAME)

L17 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1982:482722 CAPLUS

DN 97:82722

TI Composition for priming photopolymerization containing N-oxy-N-heterocyclic compounds as activators

IN Specht, Donald Paul; Farid, Samir Yacoub

PA Eastman Kodak Co., USA

SO Fr. Demande, 22 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	FR 2489982	A1	19820312	FR 1981-17068	19810909	
	FR 2489982	B1	19860221			
	CA 1216998	A1	19870120	CA 1981-376470	19810429	
	DE 3135399	A1	19820722	DE 1981-3135399	19810907	
	GB 2083832	A	19820331	GB 1981-27386	19810910	
	GB 2083832	B2	19840725			
	JP 57083501	A2	19820525	JP 1981-143148	19810910	
PRAI	US 1980-185854	Α	19800910			

AB For the priming of the addition photopolymn. of acrylic monomers a combination of a photosensitizer with an amino group, such as an amino-3-oxocoumarin derivative, 0.005-0.015 mmol/g solids, with 10 times as much of an activator, 0.05-0.2 mmol, such as an N-alkoxypyridinium salt or N-benzoyloxyphthalimide, is used. In the presence of the photoexcited sensitizer the activator liberates free radicals. The polymerizable compound forms 5-100% of the compound-binder mixture, used preferably as a 20-120µ single-phase layer on a film, paper, metal, or ceramic support. Thus, a solution was prepared containing pentaerythritol tetraacrylate 45, pentaerythritol tetramethacrylate 60, Acryloid B-48-N (binder) 120, Acryloid A-111 (binder) 120, di-Bu phthalate (plasticizer) 50.4, and tert-butyl-4-hydroxy-5-methylphenyl sulfide (stabilizer) 1.05 g in CH2Cl2 535.2 g. To 13 mL of this solution 0.08 mmol of 3-benzoyl-7-diethylaminocoumarin was added together with 0.8 mmol of

N-phenylglycine(I) and of N-methoxy-4-phenylpyridinium tetrafluoroborate(II). The solns. were coated as  $300\mu$  layers (wet) on a Cu support at 18° and dried stepwise. A sensitometric exposure and development with MeCCl3 revealed a relative sensitivity of 2.8 for I and 2.0 for II.

IT 38394-53-5

RL: USES (Uses)

(photosensitizer, in combination with activator for addition photopolymn. imaging of acrylic monomer-containing layers)

RN 38394-53-5 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(diethylamino)phenyl]methylene]- (9CI) (CA INDEX NAME)

L17 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1982:60893 CAPLUS

DN 96:60893

TI Optical recording product containing an  $\alpha\alpha'$ -bis(dialkylaminobenzylidene) ketone dye

IN Specht, Donald Paul; Thomas, Harold Todd

PA Eastman Kodak Co., USA

SO Fr. Demande, 10 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	FR 2476546	A1	19810828	FR 1981-3586	19810224
	FR 2476546	B1	19830617		
	CA 1154963	A1	19831011	CA 1981-369312	19810126
	DE 3106878	A1	19820107	DE 1981-3106878	19810224
	DE 3106878	C2	19870709		
	BE 887677	A1	19810825	BE 1981-203921	19810225
	JP 56135557	A2	19811023	JP 1981-26694	19810225
	JP 01055120	B4	19891122		
PRAI	US 1980-124382	Α	19800225		

AB A product for video disk recording using a high energy beam of 488 nm comprises a reflective support and an amorphous layer containing a binder, such as cellulose nitrate, and the colorant I (R = C1-6 alkyl and n = 0-5). Thus, 2,5-bis(4-diethylaminobenzylidene)cyclopentanone was prepared and dissolved (1 g) in cyclohexanone 60 g contg cellulose nitrate 1 g, and this composition was coated on a reflective support and dried to give a recording layer.

IT 38394-53-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and use of, as colorant in video disk recording material)

RN 38394-53-5 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(diethylamino)phenyl]methylene]- (9CI) (CA INDEX NAME)

L17 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1974:456664 CAPLUS

DN 81:56664

TI Photopolymerizable compositions capable of yielding reverse images

IN Lee, Shung-Yan

PA du Pont de Nemours, E. I., and Co.

SO U.S., 8 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 3782951	Α	19740101	US 1972-276381	19720731
DE 2338223	A1	19740221	DE 1973-2338223	19730727
BE 803047	A1	19740131	BE 1973-134085 ·	19730731
JP 49054018	A2	19740525	JP 1973-86272	19730731
JP 56024940	B4	19810609		
US 3888672	Α	19750610	US 1973-394262	19730904
PRAI US 1972-276381	Α	19720731		

AB Pos.-working photopolymerizable compns. for use in preparing relief or planog. printing plates, direct copying films, or the like are composed of an unsatd. monomer, such as polyethylene glycol dimethacrylate (I) 30-70; a hexaarylbiimidazole, such as 2,2'-bis(o-chlorophenyl)-4,4',5,5'-tetrakis(m-methoxyphenyl)biimidazole (II) 49; a H- or a electron donor compound, such as Rhodanine (III) <0.4; and a polymeric binder, such as poly(methyl methacrylate) (IV) 53-58% by weight The compns. are capable of yielding reverse photopolymer images since relatively intense radiation prevents polymerization, while less intense radiation yields photopolymn.

Thus,

a composition containing trichloroethylene 10.8, I 1.2, II 0.1, III 0.01, IV 1.2,

2,5-bis(p-diethylaminobenzylidene)cyclopentanone 0.001 g, and MeOH 1 ml was coated on a poly(ethylene terephthalate) support, air dried for 30 min, a poly(ethylene terephthalate) film placed on the tacky surface, the element exposed through a  $\sqrt{-2}$  step tablet for 2.5 min to a W-I light at 54 in., the cover sheet removed, and the surface dusted with toner; steps 1-2 accepted toner; steps 3-5 rejected toner; steps 6-21 accepted toner.

IT 38394-53-5

RL: USES (Uses)

(photopolymerizable compns. containing, for planog. or relief printing plates)

RN 38394-53-5 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(diethylamino)phenyl]methylene]- (9CI) (CA INDEX NAME)

L17 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1974:114843 CAPLUS

DN 80:114843

TI Photopolymerizable compositions containing cyclic cis- $\alpha$ -dicarbonyl compounds and selected sensitizers

IN Chang, Catherine T.

PA du Pont de Nemours, E. I., and Co.

SO U.S., 7 pp. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 3756827	Α	19730904	US 1972-220694	19720125
	DE 2302820	A1	19730830	DE 1973-2302820	19730120
	GB 1415378	Α	19751126	GB 1973-3240	19730122
	BE 794482	A1	19730724	BE 1973-126841	19730124
	FR 2169192	A1	19730907	FR 1973-2445	19730124
	JP 48084183	A2	19731108	JP 1973-10004	19730125
	US 28789	E	19760427	US 1975-608673	19750828
PRAI	US 1972-220694	A	19720125		

AB Photopolymerizable compns. of high photospeed consists of an ethylenically unsatd. monomer capable of photoinitiated addition polymerization and photoinitiator

combination of a cyclic cis-α-dicarbonyl compound, such as 2,3-norbornadione (I), 2,2,5,5-tetramethyltetrahydro-3,4-furandione, indole-2,3-dione, and a radiation-absorbing compound having a maximum absorption at <520 nm capable of sensitizing the polymerizing action of the above dicarbonyl compound, such as Michler's ketone (II), 3,3'-diethylthiacyanine p-toluenesulfonate, 4-(dimethylamino)benzoquinone, Acridine Orange, and optionally a free-radical producing H or electron donor compound and a polymeric binder. Thus, a solution containing cellulose acetate 2.7, cellulose acetate butyrate 4.2, trimethylolpropane triacrylate 13.5, Me2CO 116, I 0.047, and II 0.047 g was coated on a poly(ethylene terephthalate) (III) support at 0.002 in. wet thickness, dried, laminated with a III cover sheet, exposed using a 1000-W W-lamp at 44 in. through an Eastman Kodak M-type number 5 step tablet, and developed by dusting with Jungle Black to give an equivalent exposure time of 2 vs. .apprx.400 for a II-free control.

IT 38394-53-5

RL: USES (Uses)

 $(photosensitizer, \ for \ trimethylolpropane \ triacrylate \ photopolymerizable \ compns.)$ 

RN 38394-53-5 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(diethylamino)phenyl]methylene]- (9CI) (CA INDEX NAME)

L22 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:100741 CAPLUS

DN 112:100741

TI Photopolymerization initiator and thermal-transfer recording medium

IN Okuma, Norio

PA Canon K. K., Japan; Sanyo Chemical Industries Ltd.

SO Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI JP 01174502 PRAI JP 1987-335731	A2	19890711 19871228	JP 1987-335731	19871228	

The photopolymn. initiator is composed of I or II [Ar1, Ar2 = aromatic ring, heterocyclic ring; R1 = H, C1-10 alkyl, alkenyl, alkoxy, or alkylthio, C6-12 aryl, aryloxy, or heterocyclic ring with number of C and non-C atoms to be 5-15; X = non-metallic atom for forming a ring], and III [Y = halogen; R = alkyl, aryl, alkenyl; Q = CY3, NH2, etc.]. The thermal-transfer recording layer is composed of the photoinitiator, and monomer, oligomer, or polymer with unsatd. double bond or these mixture An image-forming material may be encapsulated. This initiator is especially useful in one-shot color recording.

IT 125407-16-1

RL: USES (Uses)

(photopolymn. initiator composition containing triazine derivative and)

RN 125407-16-1 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(1-pyrrolidinyl)phenyl]methylene]- (9CI) (CA INDEX NAME)

# (FILE 'HOME' ENTERED AT 23:20:23 ON 10 JUN 2005)

L1 L2 L3 L4 L5 L6 L7 L8	FILE 'REGISTRY' ENTERED AT 23:20:30 ON 10 JUN 2005 STRUCTURE UPLOADED STRUCTURE UPLOADED STRUCTURE UPLOADED STRUCTURE UPLOADED 44 SEA SSS FUL L1 5 SEA SSS FUL L2 0 SEA SSS FUL L3 1 SEA SSS FUL L4 D L8
L9 L10 L11	FILE 'CAPLUS' ENTERED AT 23:22:24 ON 10 JUN 2005 106 SEA L5 14 SEA L6 4 SEA L8 D L11 BIB AB HITSTR D L11 1-4 BIB AB HITSTR D L10 1-14 TI BIB D L10 1-14 TI BIB
L12 L13 L14 L15 L16 L17	26980 SEA 3-D OR 3 D 0 SEA L9 AND L12 87246 SEA THREE DIMENSIONAL 0 SEA L14 AND L9 156072 SEA IMAGING 8 SEA L9 AND L16 D 1-8 BIB AB HITSTR D L9 1-25 TI
L18 L19 L20 L21	FILE 'REGISTRY' ENTERED AT 23:31:26 ON 10 JUN 2005 STRUCTURE UPLOADED STRUCTURE UPLOADED 1 SEA SSS FUL L18 0 SEA SSS FUL L19 D L20
L22	FILE 'CAPLUS' ENTERED AT 23:32:50 ON 10 JUN 2005  1 SEA L20 D BIB AB HITSTR